

# A study to assess the knowledge and practices regarding awareness of COVID 19 safety precaution among the higher secondary school students at Puducherry.

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**Abstract:** Safety precautions are necessary to prevent the potential spread of COVID 19 in school settings. The aim of the study was to assess the Knowledge and Practices regarding the awareness of COVID-19 safety precaution among higher secondary school students at Puducherry. A Quasi experimental research design of 239 higher secondary school students by purposive random sampling technique. The structured questionnaire were administered. Among higher secondary school students, in the pretest 20% had adequate knowledge and 15% had moderate knowledge and 10% had inadequate knowledge, 20% had high level of practice, 15% had moderate level of practice and 10% had low level of practice. School students have to know the self-protection and practice and knowledge of COVID-19 before going to out. Hence the students now well known about COVID-19 virus after some awareness to improve their 100% protection.

**Key Words:** Knowledge, Practices, awareness, COVID-19, safety precaution, higher secondary school students

## 1. INTRODUCTION:

Corona virus disease 2019 (COVID-19) according to the Centre for Disease Control and Prevention (CDC) (2020) is caused by a previously unknown corona virus strain known as Severe Acute Respiratory Syndrome Corona virus 2 (SARS-CoV-2). Corona virus is a member of the Corona viridian family, is part of the Rationales order. Corona virus features thorns and a crown-like appearance on the surface. It's a tiny organism with a single-stranded RNA that's 65–125 mm in diameter and weights 26–32 lbs <sup>(1)</sup>. The virus has no cure and the mainstay of prevention is taking steps to reduce transmission. Small droplets released by patients during coughing, sneezing and talking, as well as infected hand and surfaces bearing the virus <sup>(2)</sup>.

Since the inception of Coronavirus also known as COVID-19 in December 2019, the disease has affected every aspect of human endeavour, including all levels of educational institutions in both the developed and developing worlds. Although, children and adolescents are less sensitive to the virus due to their active immunity and continual bodily activity. <sup>(3)</sup>

However, schools include not just students and adolescents but also teaching and non-teaching staff who may have underlying health concerns that make them vulnerable to the disease. There have been over 200 million cases and over four million fatalities attributed to the disease, as a result, the World Health Organization (WHO) classified the disease to be a global pandemic. <sup>(4, 5, 6)</sup>

Today, Children and Adolescents and young people are global citizens, powerful agents of change and the next generation of caregivers of scientists and doctors. Any crisis present opportunity to help them learn, cultivate, compassion and increase resilience while building safe and more caring community. Having information fact about COVID 19 will help diminished the student's fears and anxieties around the disease and support their ability to cope with an secondary impacts in their lives. This guidance provides key management and consideration for engaging school administrators, teachers and staff, parents, caregivers and community members as well as children themselves in promoting safe and healthy schools. <sup>(7, 8, 9)</sup>

The purpose of the present study to provide clear and actionable guidance for safe operations through the prevention, early detection and control of COVID 19 in school and other educational facilities. The guidance, while specific to countries that already confirmed the transmission of COVID 19, is still relevant in all other context. Education can encourage the students to become advocates for disease prevents and control at home, in school, and in their

community by taking to others about how to prevent the spread of virus to maintaining awareness of COVID 19 safety precautions can promote good school environment.

## 2. MATERIALS & METHODS:

**Design:** A Quasi experimental design was adapted for the present study.

**Sample Size:** A sample of 239 higher secondary school students.

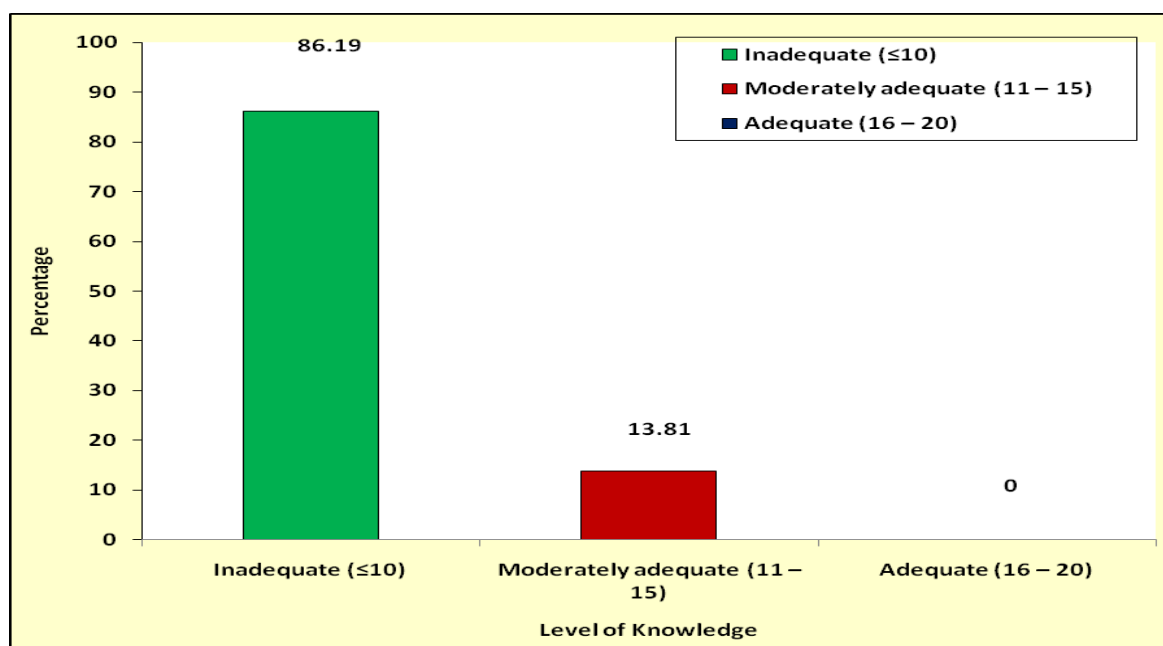
**Sampling Technique:** Purposive random sampling technique was used to select the sample.

**Data collection Procedure:** After formal written permission obtain from institution research committed and will get IEC clearance from VMCON, Puducherry. Informed consent will obtain from the authorities and study participants of selected school student and will inform them about the propose of the study. The structure questionnaire will be used to collect the data after getting tool validation the study will be content among the school students within one year period. The self-structured questionnaire will be administer to the study participants and will ask them to be not fill it. If study participants clear idea about the questionnaire reading the English. The researcher will explain it. The research will conduct pretest the time to be taken for pretest to each participant around 15-20 minutes after pretest immediately research will get the structure teaching program. The time will be given around 30 minutes. After one hour of interval the research will conduct the conduct the post test. The time will be taken for posttest around 15-20 minutes totally the process will take time around I hours 10 minutes. The data were analyzed based on objectives and hypothesis of the study by using descriptive statistics used for describe the demographic variables such as frequency, percentage, mean, standard deviation used for asses the level of knowledge. Inferential statistics such as chi-square test , 'p' value and paired 't' test.

## 3. RESULTS:

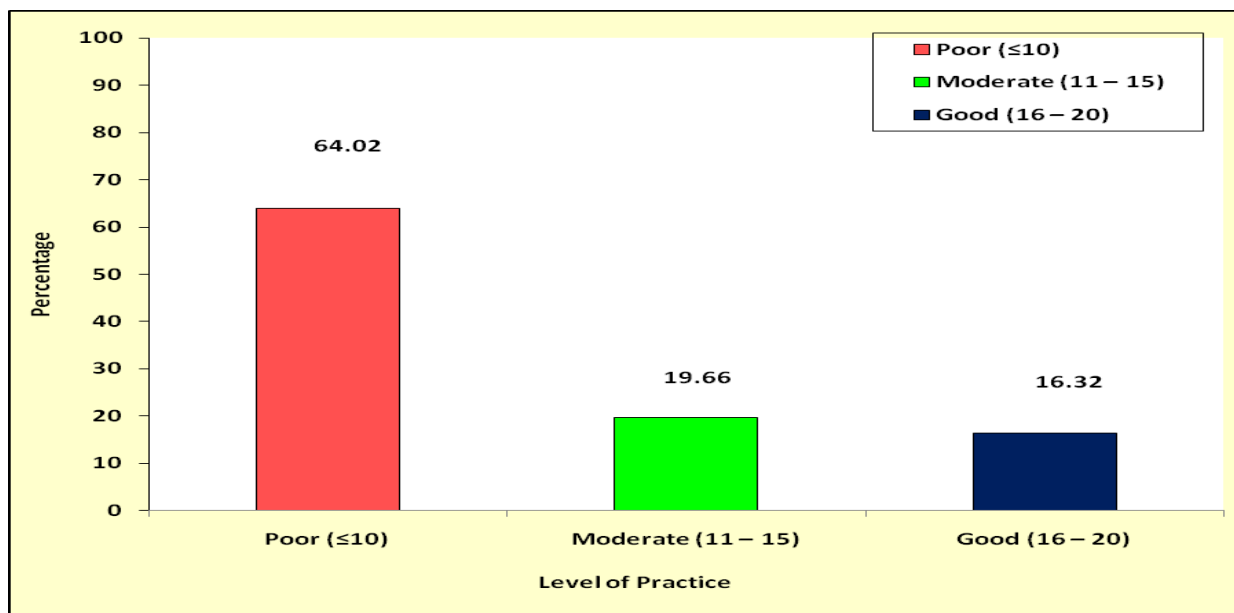
Frequency and percentage distribution of demographic variables of higher secondary school students, most of the them, 124(51.9%) were aged between 13 – 14 years, 239(100%) were female, 219(91.6%) were Hindus, 125(52.3%) were studying 9<sup>th</sup> standard, 100(41.9%) of father were coolie, 102(42.7%) had family monthly income of between Rs.5000 – 10000, 239(100%) belonged to nuclear family, 150(62.8%) were residing in urban area, 120(50.2%) had television of sources of information (COVID-19) and 239(100%) had followed safety precaution methods. The level of knowledge regarding the awareness of COVID-19 safety precautions among higher secondary school students, 206(86.19%) had inadequate knowledge and 33(13.81%) had moderately adequate knowledge regarding the awareness of COVID-19 safety precautions. (Figure 1)

**Figure 1: Level of knowledge regarding the awareness of COVID-19 safety precautions among higher secondary school students**



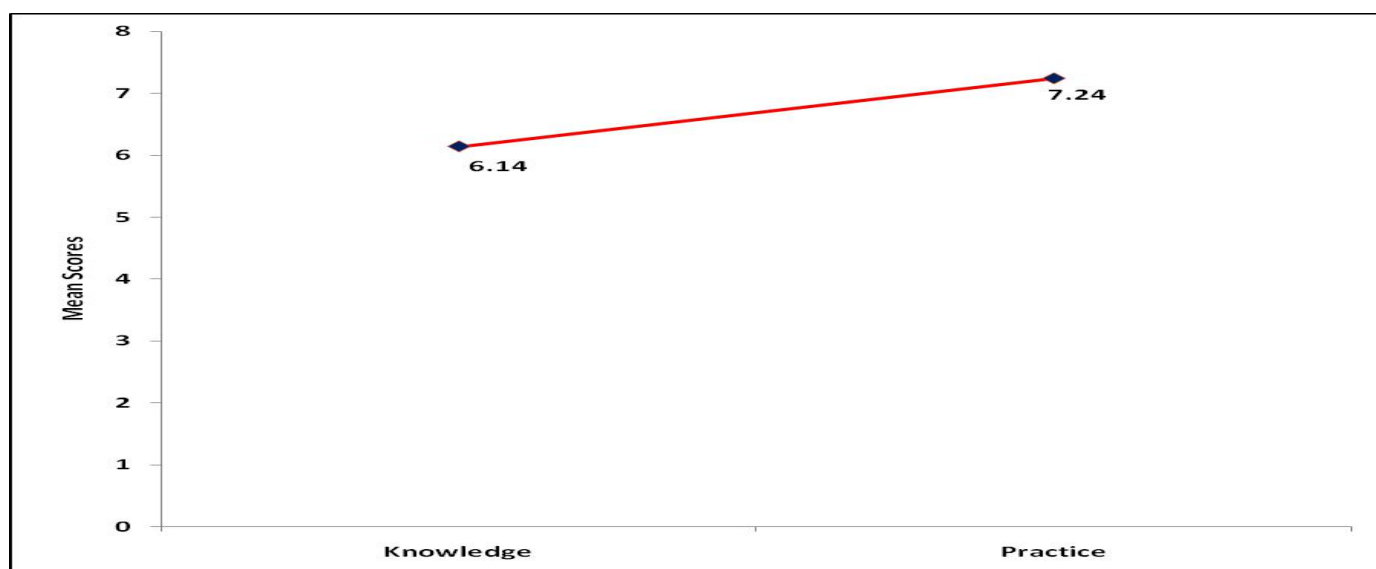
The level of practice regarding the awareness of COVID-19 safety precautions among higher secondary school students, 153(64.02%) had poor practice, 47(19.66%) had moderate practice and 39(16.32%) had good practice regarding the awareness of COVID-19 safety precautions. (Figure 2)

Figure 2: Level of practice regarding the awareness of COVID-19 safety precautions among higher secondary school students



The Correlation between knowledge and practice regarding the awareness of COVID-19 safety precautions among the higher secondary school students, the mean score of knowledge was  $6.14 \pm 3.48$  and the mean score of practice was  $7.24 \pm 6.38$ . The calculated Karl Pearson's Correlation value of  $r = 0.420$  shows a positive correlation between knowledge and practice which was statistically significant at  $p < 0.001$  level. This finding clearly infers that when knowledge regarding the awareness of COVID-19 safety precautions among higher secondary school students increases their practice towards it also increases. (Figure 3)

Figure 3: Correlation between knowledge and practice regarding the awareness of COVID-19 safety precautions among the higher secondary school students



The demographic variable educational qualification ( $\chi^2=8.486$ ,  $p=0.037$ ) had shown statistically significant association with level of knowledge regarding the awareness of COVID-19 safety precautions among the higher secondary school students at  $p<0.05$  level and the other demographic variables had not shown statistically significant association with level of knowledge regarding the awareness of COVID-19 safety precautions among the higher secondary school students.

The demographic variable religion ( $\chi^2=9.208$ ,  $p=0.010$ ) had shown statistically significant association with level of practice the awareness of COVID-19 safety precautions among the higher secondary school students at  $p<0.05$  level and the other demographic variables had not shown statistically significant association with level of practice regarding the awareness of COVID-19 safety precautions among the higher secondary school students.

#### 4. DISCUSSION:

A quasi experimental study was used to select the sample; Total 239 higher secondary school students were selected by Purposive random sampling technique. The aim of the study was to assess the knowledge and practices regarding the awareness of COVID 19 safety precautions among the higher secondary school students at Puducherry.

#### **The first objective was to assess the pre and post-test knowledge and practices regarding awareness of COVID 19 safety precautions among the higher secondary school students**

The present study reveals that the majority of the higher secondary school students participants 206 (86.19%) were having moderate knowledge, 33 participants (13.8%) were having adequate knowledge. The present study reveals that the majority of the school students of the participants 153(64.2%) were having level of practice, 39(16.32%) were having moderate level of practices.

The similar study Conducted among the safety precaution reveals that the majority of the nursing students participants 59(59%) were having moderate knowledge 32 participants (32%) having adequate knowledge and a 9 participants (9%) were having inadequate knowledge. reveals that the majority of the nursing students of participants 72(72%) were having 20 practice(20%) were having moderate level of practice and participants (8%) were having low level of practice. <sup>(10)</sup>

#### **The second objective was to compare the knowledge and practices regarding awareness of COVID 19 safety precaution**

The study reveals that the demographic variables previous knowledge of COVID 19 had shown statistically highly significant association with prevalence about level of self-protection practices of COVID-19 among higher secondary school students. Chi square value  $p=0.010$  level.

The other demographic variables reveals no significant association with level of knowledge and self -production practices of COVID-19 among higher secondary school students respectively.

#### 5. CONCLUSION:

The study concluded that 20% had adequate knowledge and 15% had moderate knowledge and 10% had inadequate knowledge, 20% had high level of practice, 15% had moderate level of practice and 10% had low level of practice. School students have to know the self-protection and practice and knowledge of COVID-19 before going. Hence the students now well about COVID-19 virus after some awareness to improve their 100% protection.

#### **Implication to higher secondary school students**

The implication draws from this study vital concern to health team including awareness by nursing students, nursing education, nursing administration.

#### **Nursing service**

The study will help the higher secondary school students to improve their knowledge on safety precaution while at the school timing of COVID-19.

## **Nursing administration**

The nurse administration should organism in service education program among higher secondary school students to update their knowledge on occurrences and prevention of COVID-19.

### **REFERENCES:**

1. Zhu N, Zhang Dy et.al. (2020) A Novel corona virus from patient's with pneumonia in China. *New England journal of medicine*, 382(8) Page no.717-733. Available at [nejmz](http://nejmz)
2. C .Lai, T.shih. et.al. (2020) severe acute respiratory syndrome corona virus 2(SARS.COVID-2) Corona virus disease 2019 (COVID-19). The epidemic and the challenges. *International journal of antimicrobial agents*, 55(3) page no. 183-185. Available at [science direct.com](http://science.direct.com).
3. T. Singhal (2020) A review of corona virus disease. *India journal of pediatrics*, 87(4) page no.281-286. Available at [Https://pesquisa.bvsalud.org](https://pesquisa.bvsalud.org).
4. J.M Sanders, M.L Monogue (2020), pharmacologic treatment for corona virus disease 2019 (COVID 19) *Journal of the American medical association*, 323(18) page no. 1824-1836. Available at <http://pubmed.ncbi.nlm.nih.gov>.
5. M. Saqlain, M.M Munir. Et.al. (2020) knowledge, attitude, practice and perceived barriers among healthcare professional regarding COVID 19; a cross sectional survey from Pakistan, *journal of hospital infection*, 105(3) page no.419-423.
6. Chimowa, T., Hall, S., and O'Hare, B. (2020). Public Money Creation to Maintain Fundamental Human Rights during the COVID-19 Pandemic. *Health and Human Rights*, Volume 22(1), 395–398.
7. D'cruz, M., & Banerjee, D. (2020). "An invisible human rights crisis": The marginalization of older adults during the COVID-19 pandemic – An advocacy review. *Psychiatry Research*, 292.
8. Rabbani, A., Banerjee Saxena, S. and Islam, F. (2020). Research Brief: The Impact of COVID-19 on the Lives of Workers in the Bangladesh Garment Industry. Chowdhury Center & BRAC.
9. Yoder, J. (2020). Human Right–Which Human; What Rights? Bio politics and Bare Life in Migration and Covid-19. *Seton Hall Journal of Diplomacy and International Relations*, 21(2), 62-76.
10. M. Saqlain, M.M Munir. Et.al, (2020) knowledge, attitude, practice and perceived barriers among healthcare professional regarding COVID 19; a cross sectional survey from Pakistan, *journal of hospital infection*, 105(3) page no.419-423.